



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,239	09/27/2002	Arno Tissler	00173.0022.EPUS00	9441
28694	7590	07/07/2004	EXAMINER	
TRACY W. DRUCE, ESQ. 1496 EVANS FARM DR MCLEAN, VA 22101			ILDEBRANDO, CHRISTINA A	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/065,239	Applicant(s) TISSLER ET AL.	
	Examiner Christina Ildebrando	Art Unit 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 22-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 35-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-21 and 35-38 in the reply filed on April 22, 2004 is acknowledged. The traversal is on the ground(s) that the product as claimed cannot be used in a materially different process. This is not found persuasive. Applicant has not provided any evidence that the alternate use offered by the examiner cannot be accomplished. Simply claiming a product and a process of using the same product is not evidence that no other use can be accomplished. Further, restriction is proper because the search required for Group I is not required for Group II and vice versa. The requirement is still deemed proper and is therefore made FINAL.

2. Claims 22-34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 22, 2004.

Claim Objections

3. Applicant is advised that should claims 1-3 be found allowable, claims 35-36 and 38 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-21 and 35-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitation "A porous material...comprising a carrier with a first porous structure and an oxidation catalyst (OX)...which oxidation catalyst (OX) is enclosed inside the first porous structure and the oxidation catalyst (OX) comprises iron (Fe) and silver (Ag) loaded in a zeolite." This limitation renders the claim indefinite because it is not clear whether the zeolite is the porous structure or the oxidation catalyst. From the description in the specification, it appears that Fe and Ag are the oxidation catalyst loaded on a porous material, which is a zeolite. Appropriate clarification is requested. For the purposes of search and examination, the claim has been interpreted as though zeolite is the porous material and Fe and Ag are the oxidation catalyst. Otherwise, it is not clear what the first porous structure would be.

7. Claim 2 recites the limitation "wherein the first porous structure further comprises a zeolite with MFI framework type structure." This limitation renders the claim indefinite because it is not clear whether applicant is requiring two zeolites for the first porous structure or whether applicant is requiring that the zeolite is a MFI zeolite.

8. Claim 19 recites the limitation "wherein the reduction catalyst is an acidic zeolite catalyst." There is insufficient antecedent basis for this claim limitation when claim 19 is

dependent upon claim 2. It is suggested that applicant amend the claim to be dependent upon claim 4. Also, it is not clear whether applicant intends the reduction catalyst to be the zeolite or the second porous structure to be the zeolite. Appropriate clarification is requested.

9. Claim 20 recites the limitation "wherein the reduction catalyst." There is insufficient antecedent basis for this claim limitation when claim 20 is dependent upon claim 2. It is suggested that applicant amend the claim to be dependent upon claim 4.

10. Claim 21 recites the limitation "the second porous structure." There is insufficient antecedent basis for this claim limitation when claim 21 is dependent upon claim 1. It is suggested that applicant amend the claim to be dependent upon claim 4.

11. Claim 35 recites the limitation "A porous material...comprising a carrier with a first porous structure and an oxidation catalyst (OX)...which oxidation catalyst (OX) is enclosed inside the first porous structure and the oxidation catalyst (OX) comprises iron (Fe) and silver (Ag) loaded in a zeolite." This limitation renders the claim indefinite because it is not clear whether the zeolite is the porous structure or the oxidation catalyst. From the description in the specification, it appears that Fe and Ag are the oxidation catalyst loaded on a porous material, which is a zeolite. Appropriate clarification is requested. For the purposes of search and examination, the claim has been interpreted as though zeolite is the porous material and Fe and Ag are the oxidation catalyst. Otherwise, it is not clear what the first porous structure would be.

12. The term "substantially only" in claim 36 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification

Art Unit: 1725

does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

13. Claim 37 recites the limitation "wherein the first porous structure further comprises a zeolite with MFI framework type structure." This limitation renders the claim indefinite because it is not clear whether applicant is requiring two zeolites for the first porous structure or whether applicant is requiring that the zeolite is a MFI zeolite.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-3 and 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-167390.

JP 2000-167390 discloses a hydrocarbon adsorbent useful in the purification of exhaust gas. The catalyst composition comprises silver, phosphorus and iron on zeolite as catalyst (Abstract). Suitable zeolites include MFI type zeolites [0012]. The use of ZSM-5 is exemplified. With respect to the language of the claims the MFI zeolite is considered to meet the first porous structure and the Fe and Ag are considered to meet the oxidation catalyst.

The intended use limitations recited throughout claims 1-3 and 35-38 are noted by the examiner. While intended use recitations cannot entirely be disregarded, in

composition and article claims, the intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. *In re Casey*, 370 USPQ 235 and *In re Otto*, 312 USPQ 458. It is the position of the examiner that the prior art structure is capable of performing the intended use and therefore meets the instant claims.

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by JP 2000-167390.

16. Claims 1-5, 7-11, 13-14, 17-21, and 35-38 are rejected under 35U.S.C. 102(b) as being anticipated by EP 0 582 743.

EP 0 582 743 discloses a catalyst composition useful in the purification of nitrogen oxides in exhaust gas. The catalyst composition comprises a zeolite which is exchanged with a metal such as iron (page 4, lines 10-15). It is taught that the metal exchanged zeolite may be impregnated with a metal such as silver (page 7, lines 35-50). Suitable zeolites include MOR, MFI, and FER (page 6, lines 50-55). With respect to the language of the claims, the zeolite is considered to meet the first porous structure and the iron and the silver are considered to meet the oxidation catalyst.

The reference further teaches that the metal exchanged and metal impregnated zeolite may be combined with an additional catalyst comprising platinum or palladium on ZSM-5 (page 8, lines 45-50). It is taught that the catalyst composition may be arranged in layers, with the metal exchanged, metal impregnated layer as the first layer followed by the platinum or palladium ZSM-5 as the second layer (page 18, lines 40-55). With respect to the language of the claims, the platinum or palladium is considered to

meet the reduction catalyst and the ZSM-5 is considered to meet the second porous structure.

The intended use limitations recited throughout claims are noted by the examiner. While intended use recitations cannot entirely be disregarded, in composition and article claims, the intended use must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. *In re Casey*, 370 USPQ 235 and *In re Otto*, 312 USPQ 458. It is the position of the examiner that the prior art structure is capable of performing the intended use and therefore meets the instant claims.

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by EP 0 582 743.

Allowable Subject Matter

17. Claims 6, 12, and 15-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

18. The following is a statement of reasons for the indication of allowable subject matter: With respect to claim 6, the prior art of record does not teach or suggest a porous material, wherein the first and second porous material are provided in the same coating layers. With respect to claim 12, the prior art of record does not teach or suggest a porous material wherein the first and second porous structures are a physical mixture. With respect to claim 15, the prior art of record does not teach or suggest a

porous material wherein the content of oxidation catalyst has been reduced in outer layers of the first zeolite. With respect to claim 16, the prior art of record does not teach or suggest a porous material wherein an additional zeolite crystal layer with a reduced content of oxidation catalyst has been crystallized on the first zeolite.

Conclusion

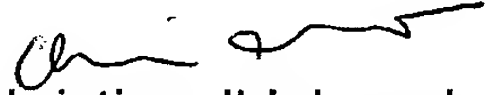
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (571) 272-1176. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Christina Ildebrando
Patent Examiner
Art Unit 1725

7/5/04

CAI
July 5, 2004